

## VEHICLE TECHNOLOGIES PROGRAM

# Ford Escape Advanced Research Fleet

Number of vehicles: 18 Date range of data received: 07/01/2011 to 07/31/2011

Reporting period: July 2011 Number of vehicle days driven: 194

### All Trips Combined

Overall gasoline fuel economy (mpg)	42
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	114
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	76
Total number of trips	800
Total distance traveled (mi)	9,275

## Trips in Charge Depleting (CD) mode<sup>3</sup>

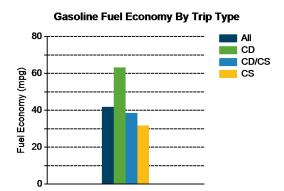
Gasoline fuel economy (mpg)	63
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	166
Number of trips	519
Percent of trips city   highway	85%   15%
Distance traveled (mi)	3,183
Percent of total distance traveled	34%

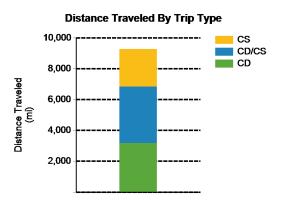
### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	39
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	53
Number of trips	150
Percent of trips city   highway	40%   60%
Distance traveled (mi)	3,666
Percent of total distance traveled	40%

### Trips in Charge Sustaining (CS) mode7

Gasoline fuel economy (mpg)	32
Number of trips	131
Percent of trips city   highway	65%   35%
Distance traveled (mi)	2,427
Percent of total distance traveled	26%







Notes: 1 - 7. Please see http://avt.inl.gov/pdf/phev/fordreportnotes.pdf for an explanation of all PHEV Fleet Testing Report notes.

Since these vehicles are flex-fuel capable, some driving events are conducted with E-85, which may decrease fuel economy results

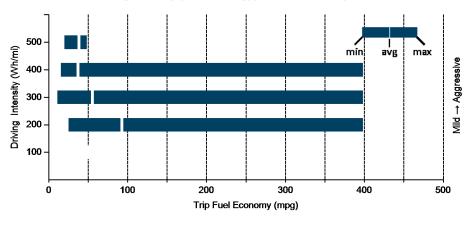
<sup>&</sup>quot;The Ford Escape Advanced Research Fleet was designed as a demonstration of customer duty cycles related to plug-in electric vehicles. The vehicles used in this demonstration have not been optimized to provide the maximum potential fuel economy."

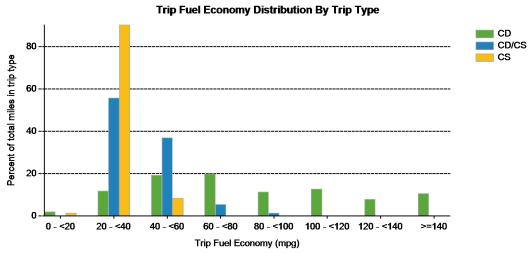
Average trip distance (mi)

City	Highway
64	62
164	170
47%	11%
258	307
4	17
Э	
41	38
49	54
24%	5%
269	322
10	34
31	32
17%	2%
259	322
	64 164 47% 258 4 269 24% 269 10

45

## Effect Of Driving Intensity (Wheel Energy) on Fuel Economy This Month



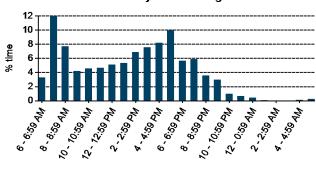




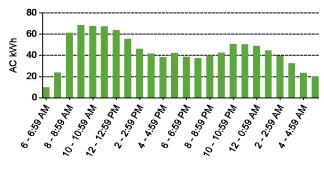
## Plug-in charging

Average number of charging events per vehicle per month when driven	27	
Average number of charging events per vehicle per day when driven	2.4	
Average distance driven between charging events (mi)	20.0	
Average number of trips between charging events	1.7	
Average time plugged in per charging event (hr)	4.4	
Average time charging per charging event (hr)	1.7	
Average energy per charging event (AC kWh)	2.3	
Average charging energy per vehicle per month (AC kWh)	62.1	
Total number of charging events	464	
Total charging energy (AC kWh)	1,056	

### **Time of Day When Driving**



#### **Time of Day When Charging**



## Time of Day When Plugging In

